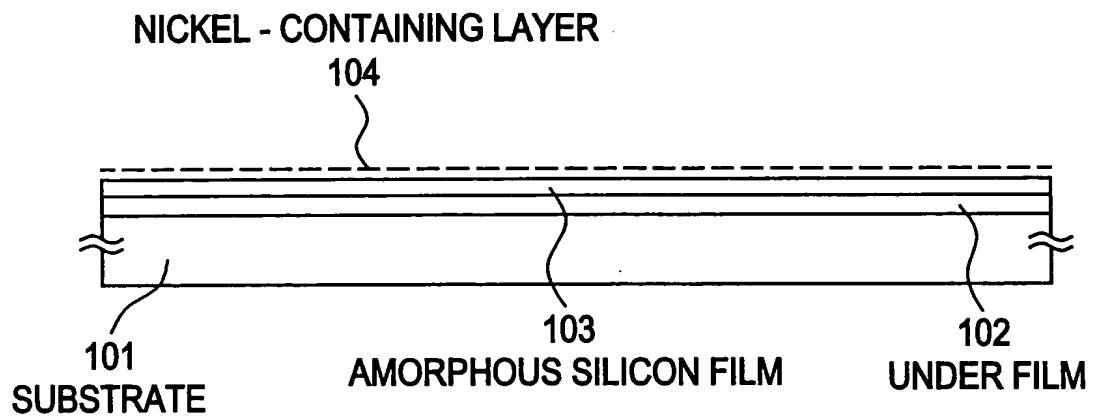
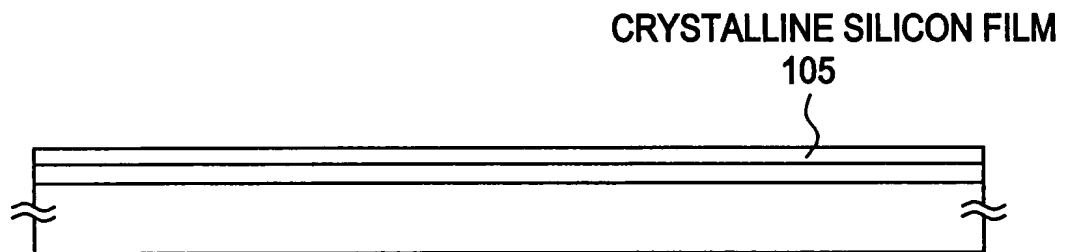


# FIG. 1A



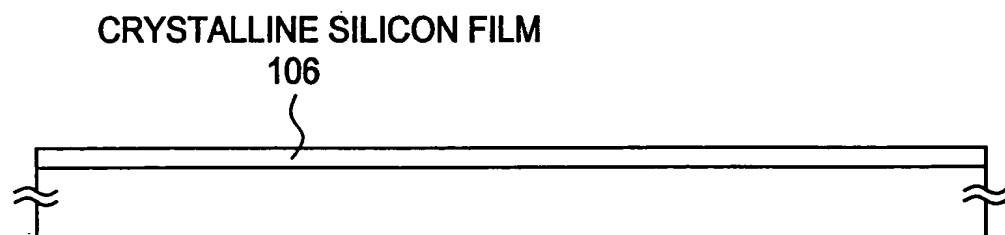
# FIG. 1B

LASER CRYSTALLIZATION STEP

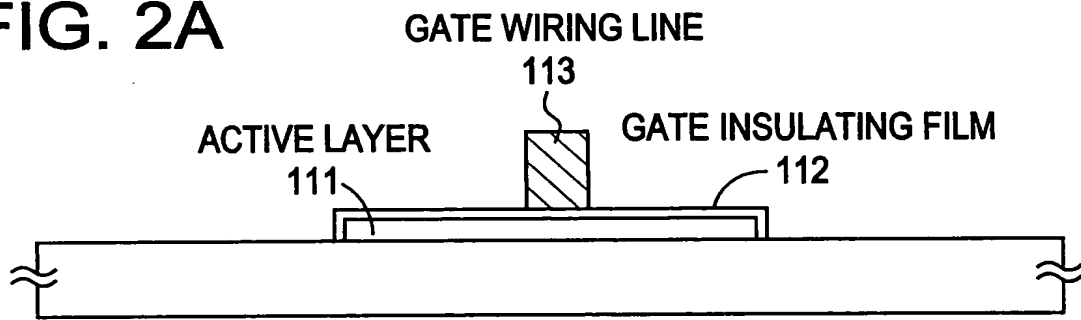


# FIG. 1C

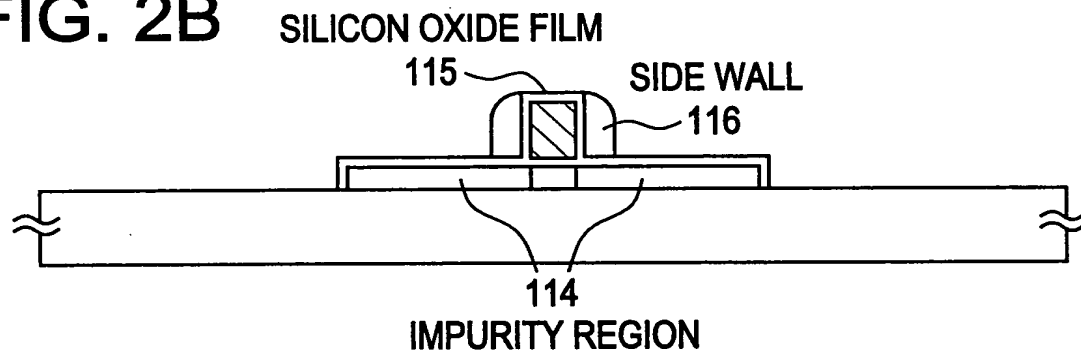
THERMAL TREATMENT STEP IN REDUCING ATMOSPHERE



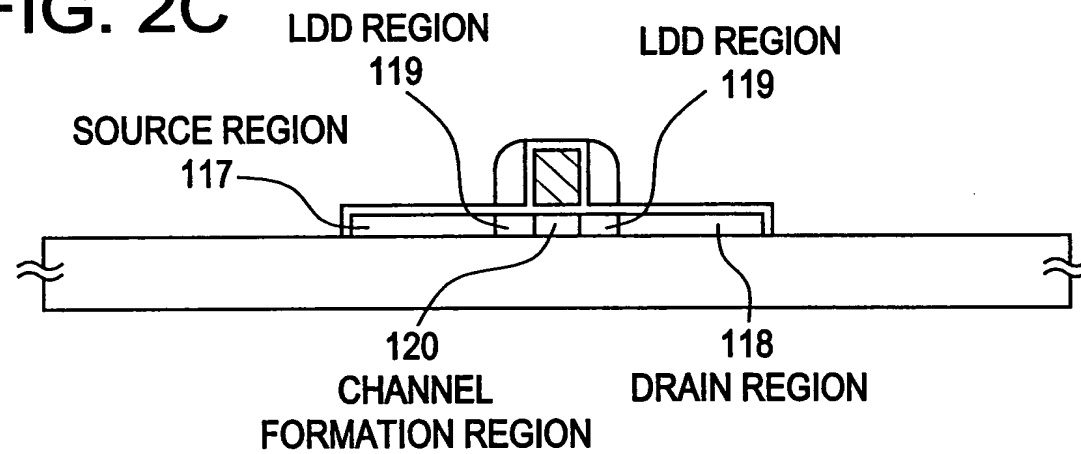
**FIG. 2A**



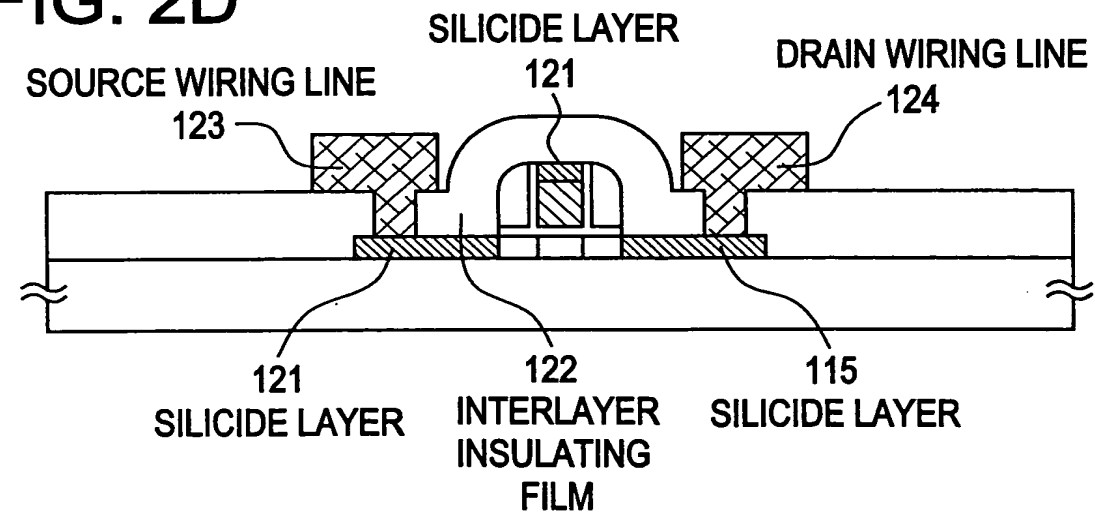
**FIG. 2B**



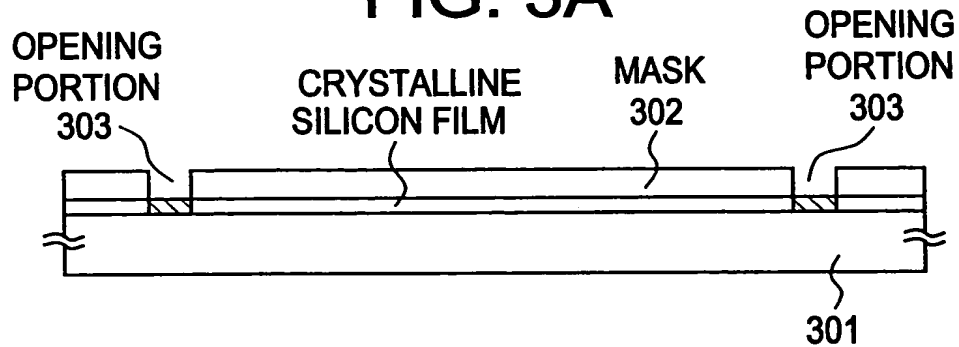
**FIG. 2C**



**FIG. 2D**

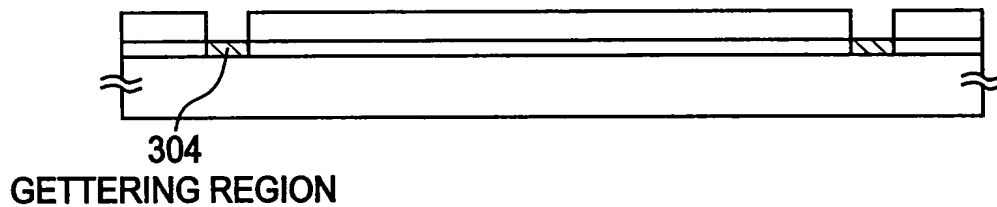


**FIG. 3A**



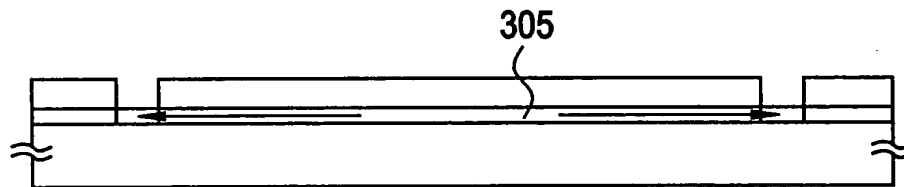
**FIG. 3B**

ADDING STEP OF PHOSPHORUS



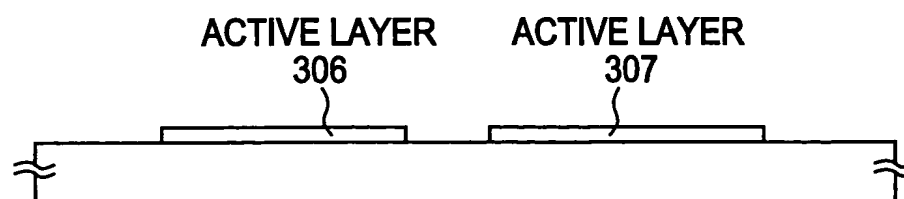
**FIG. 3C**

CRYSTALLINE SILICON FILM

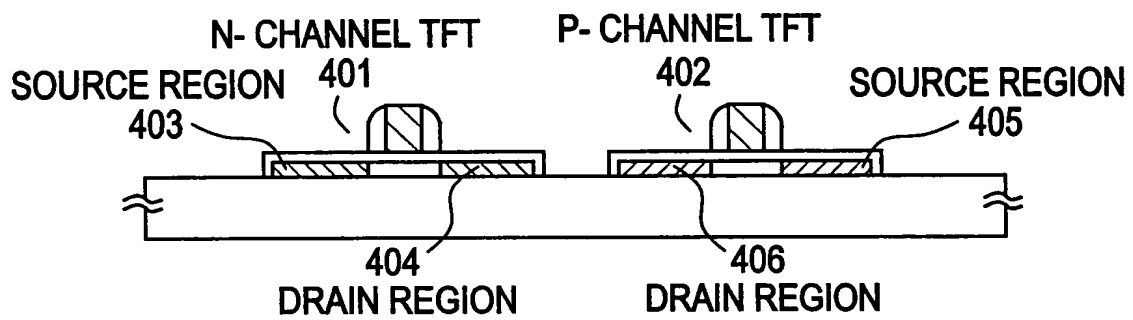


**FIG. 3D**

HEAT TREATMENT STEP IN REDUCING ATMOSPHERE

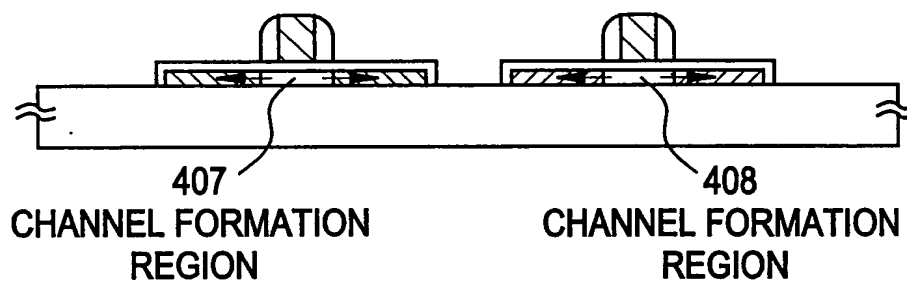


**FIG. 4A**

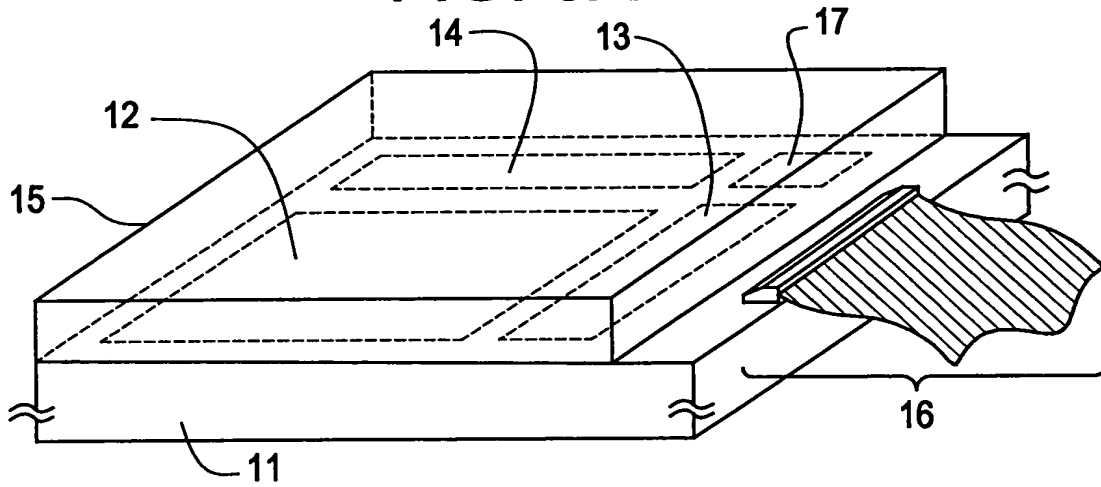


**FIG. 4B**

GETTERING STEP

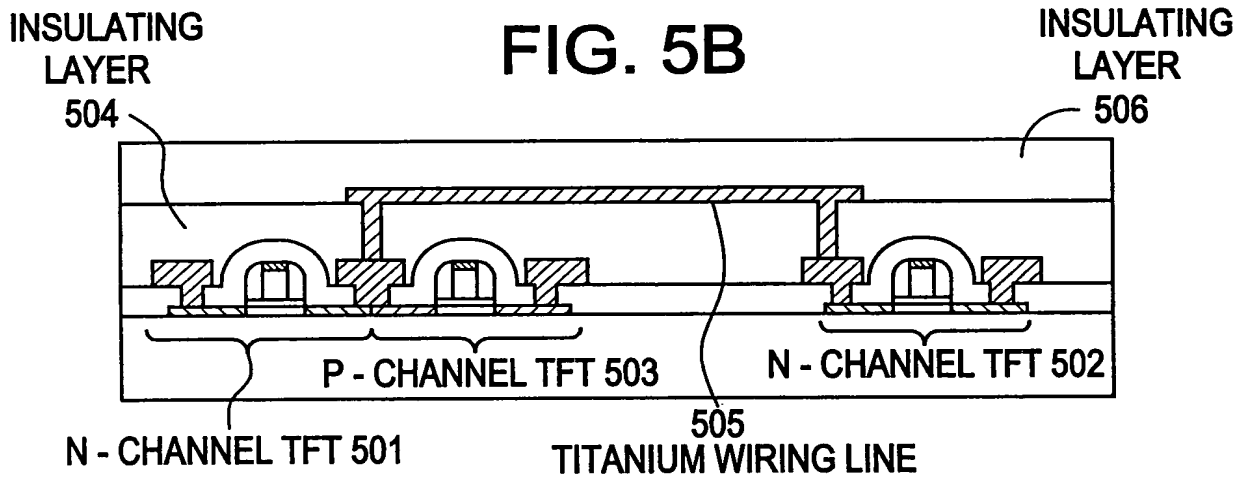


# FIG. 5A



- 11: SUBSTRATE HAVING INSULATING SURFACE
- 12: PIXEL MATRIX CIRCUIT
- 13: SOURCE DRIVER CIRCUIT
- 14: GATE DRIVER CIRCUIT
- 15: OPPOSITE SUBSTRATE
- 16: FPC
- 17: SIGNAL PROCESSING CIRCUIT

# FIG. 5B



# FIG. 5C

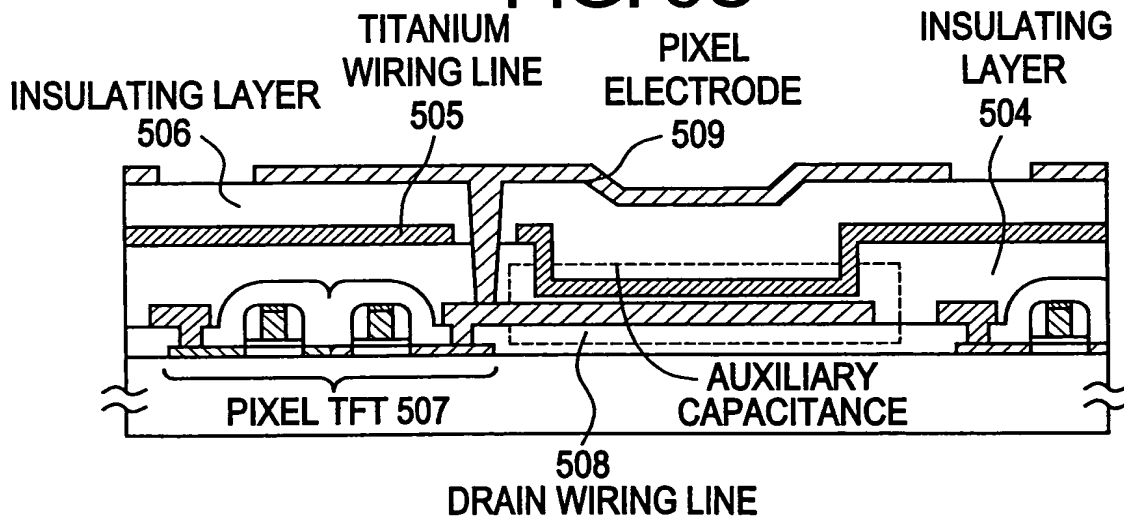


FIG. 6

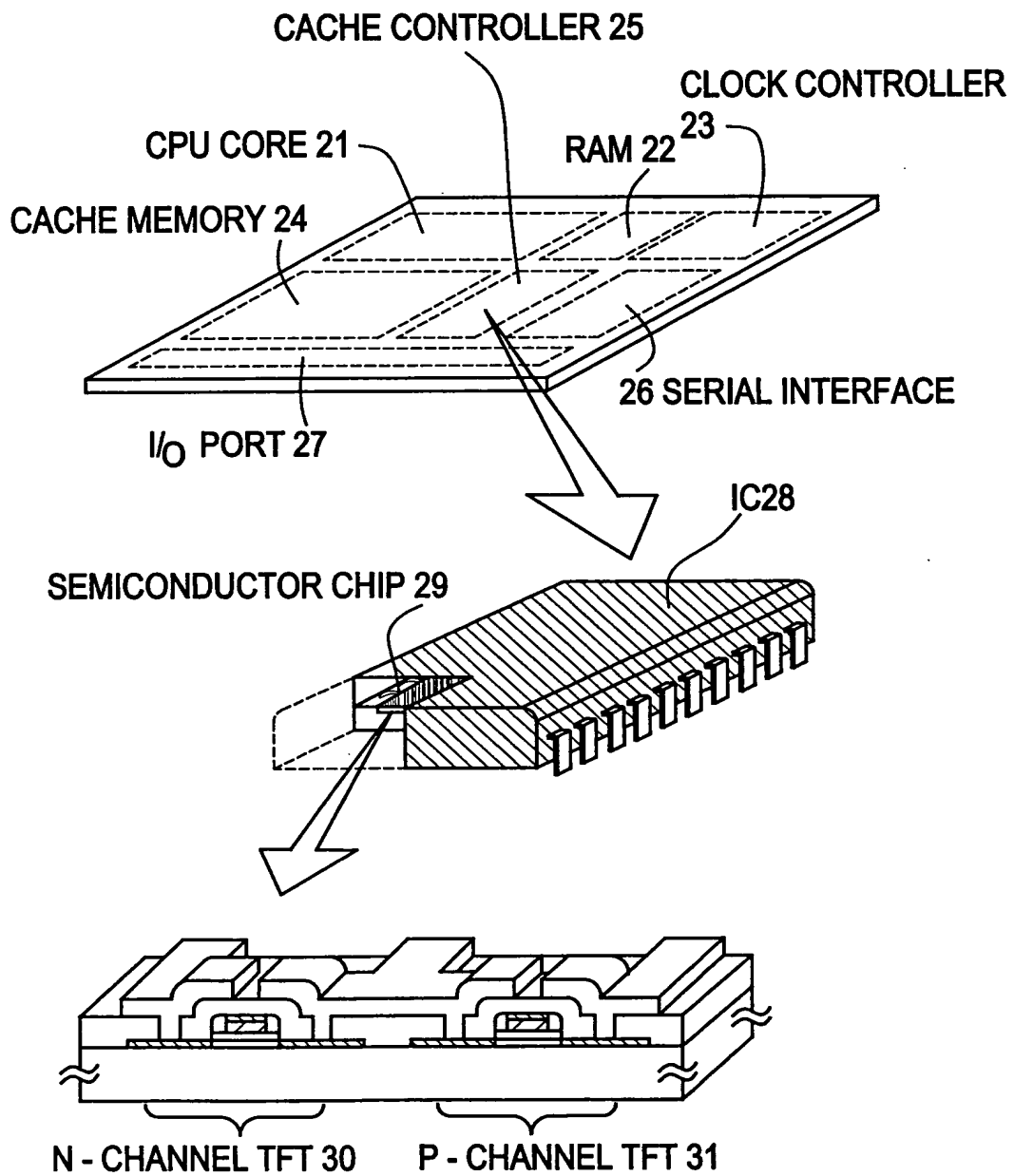


FIG. 7A

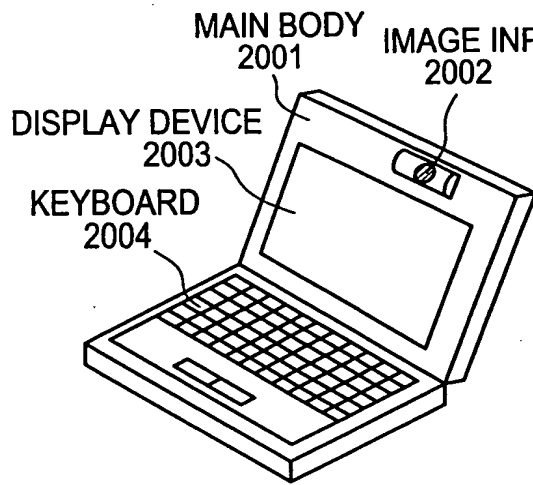


FIG. 7B

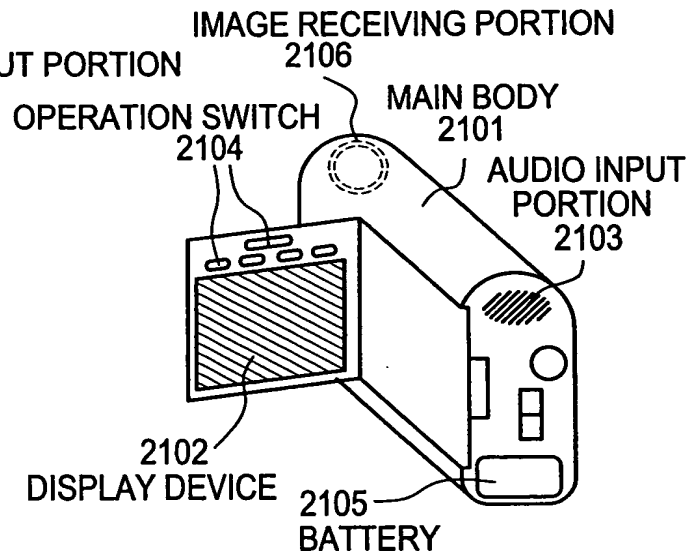


FIG. 7C

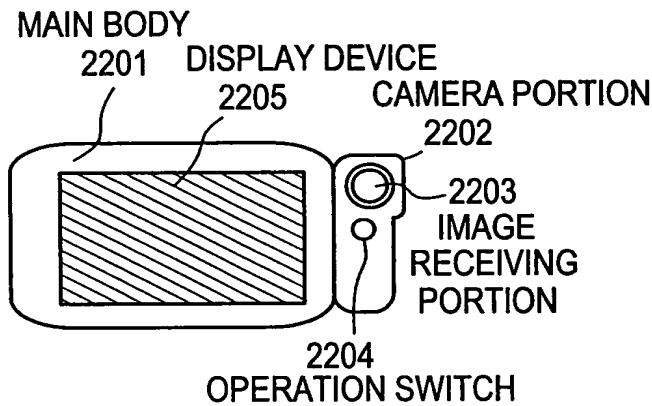


FIG. 7D

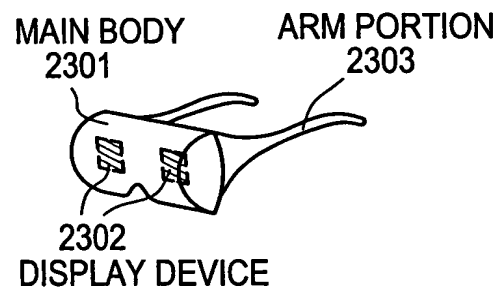


FIG. 7E

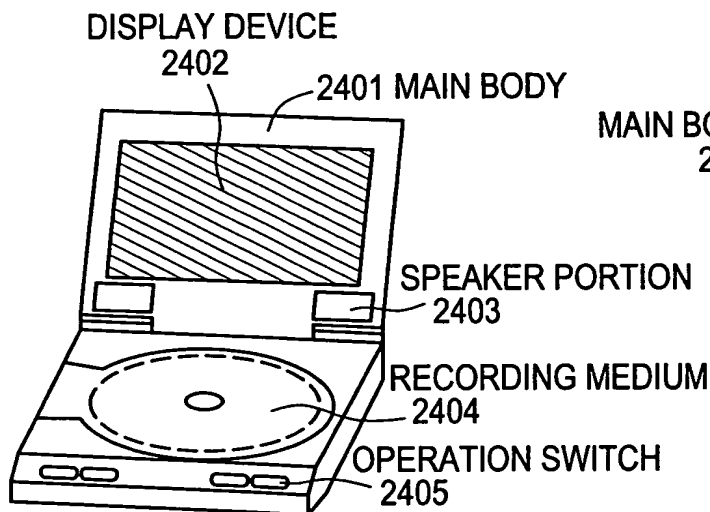
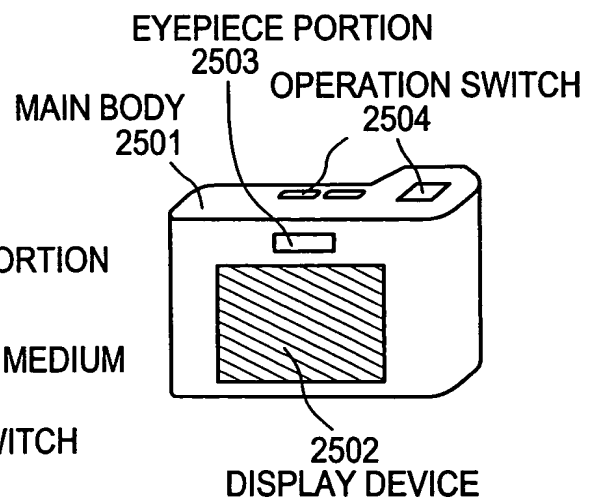
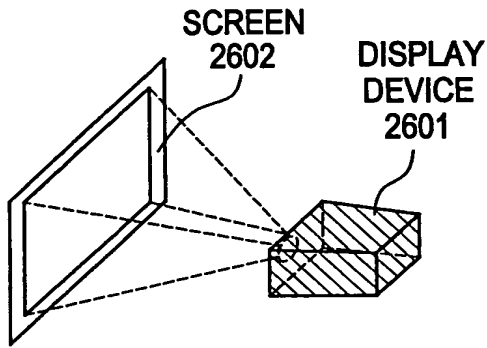


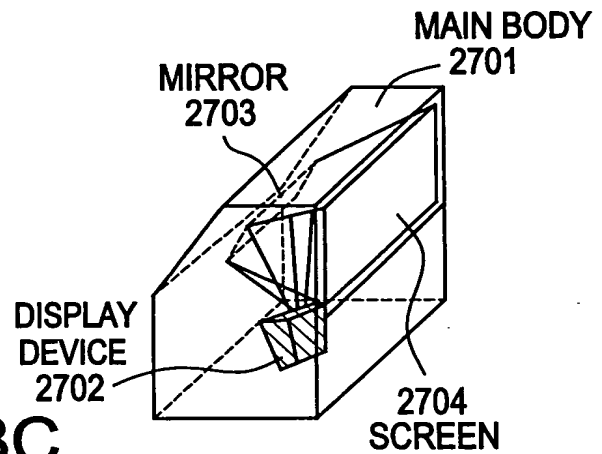
FIG. 7F



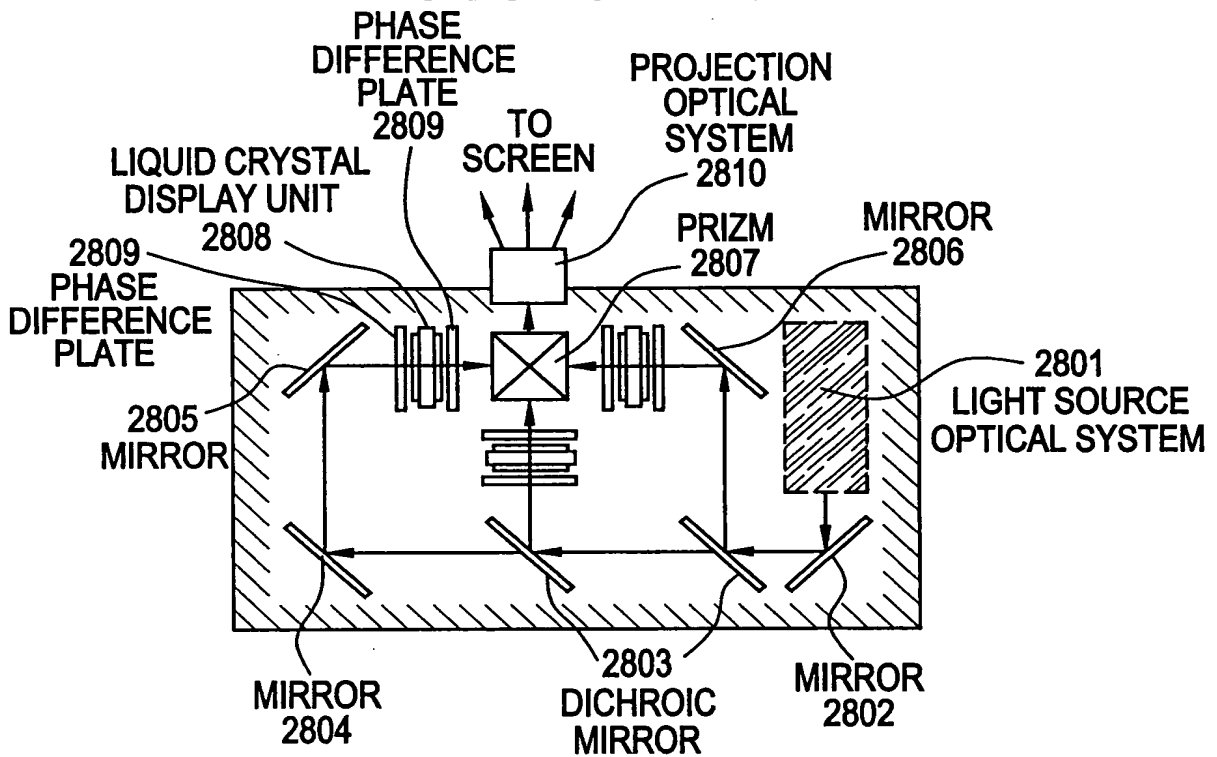
**FIG. 8A**



**FIG. 8B**



**FIG. 8C**



**FIG. 8D**

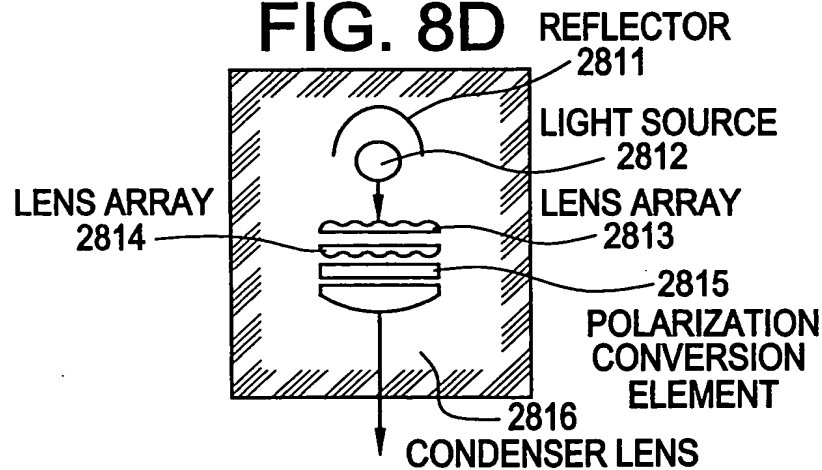




FIG. 9A

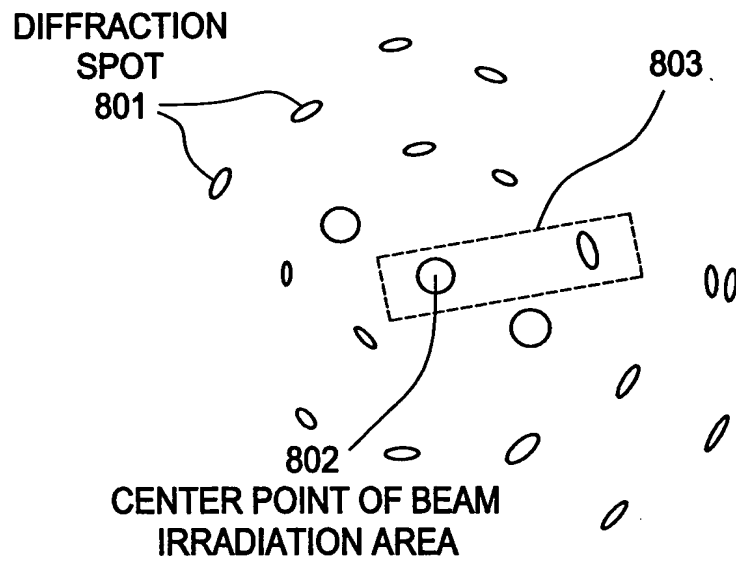


FIG. 9B

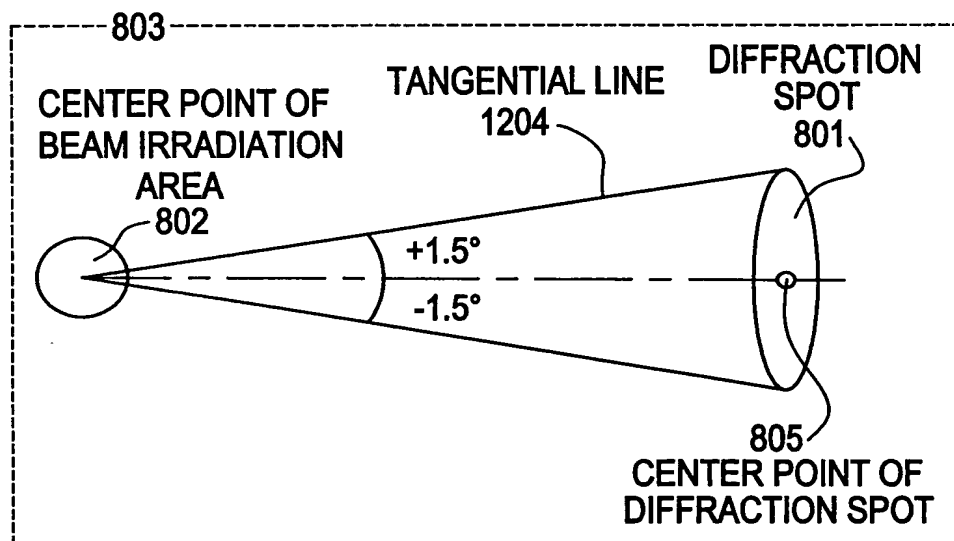


FIG. 10

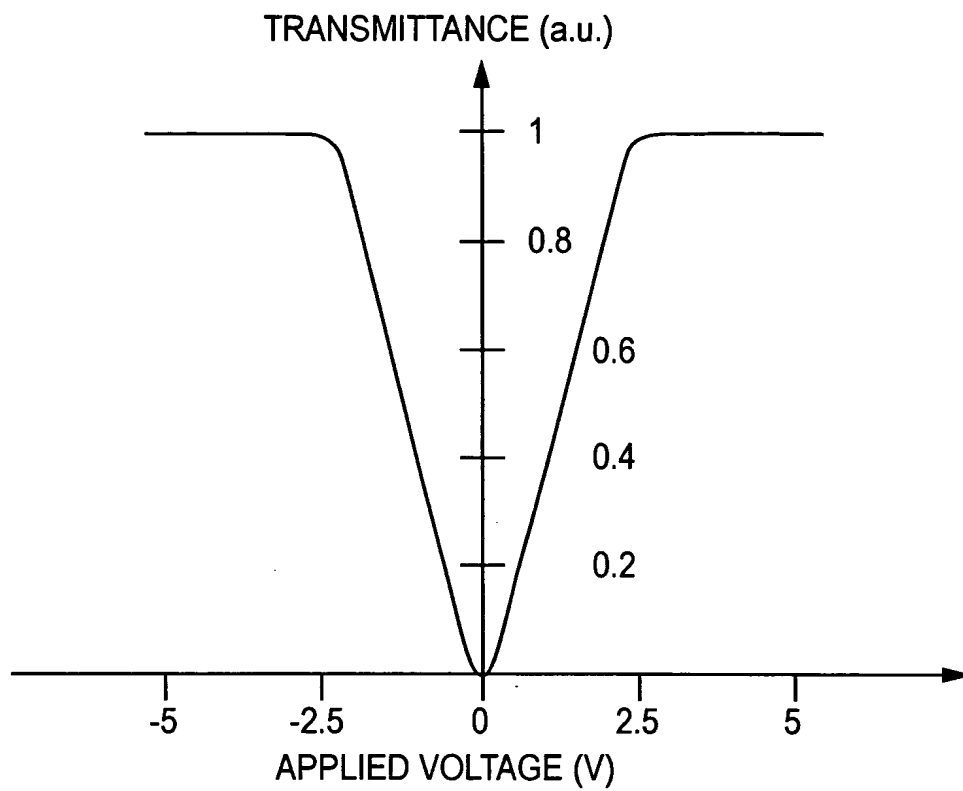
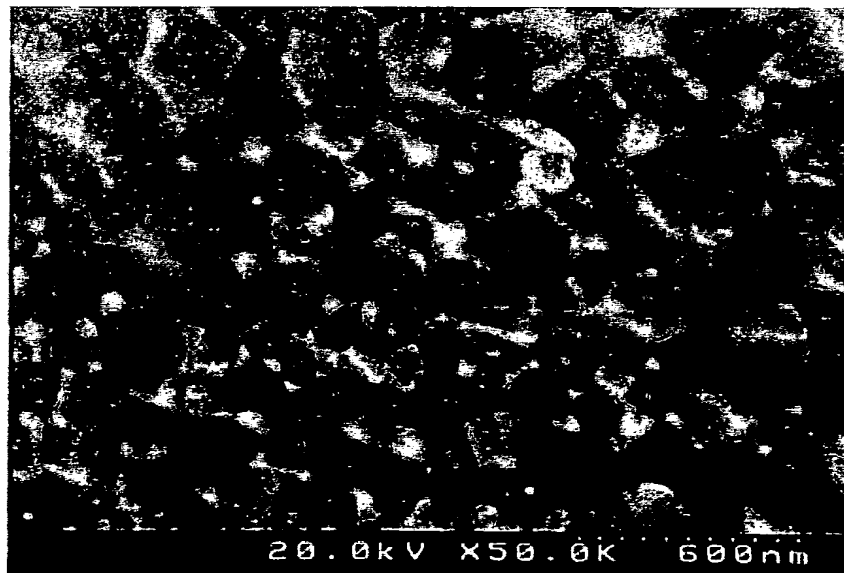
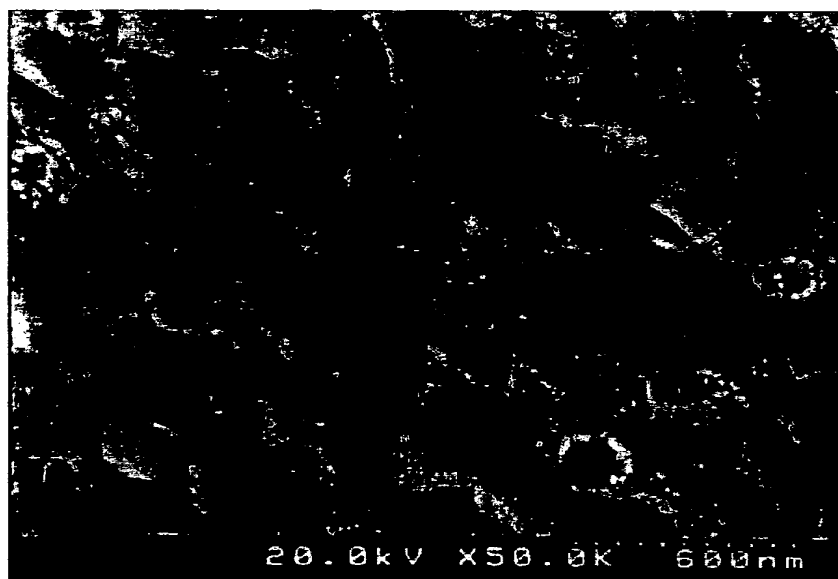


FIG. 11



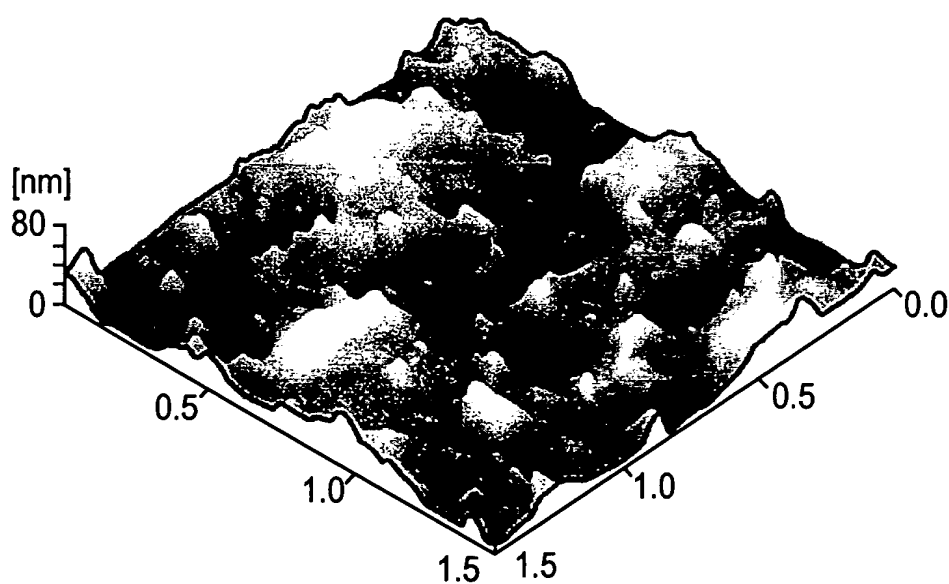
BEFORE HIGH TEMPERATURE ANNEALING

FIG. 12



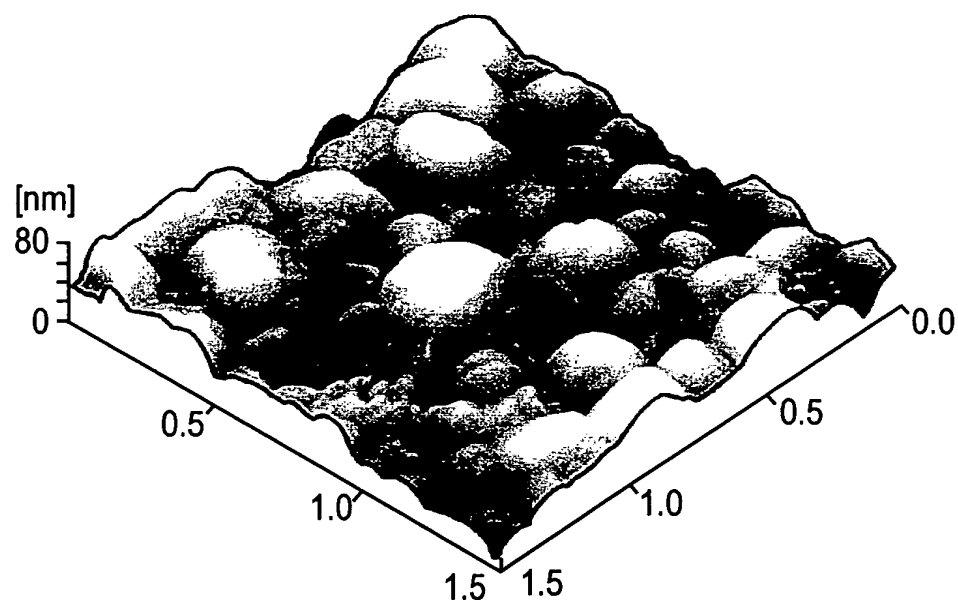
AFTER HIGH TEMPERATURE ANNEALING

FIG. 13



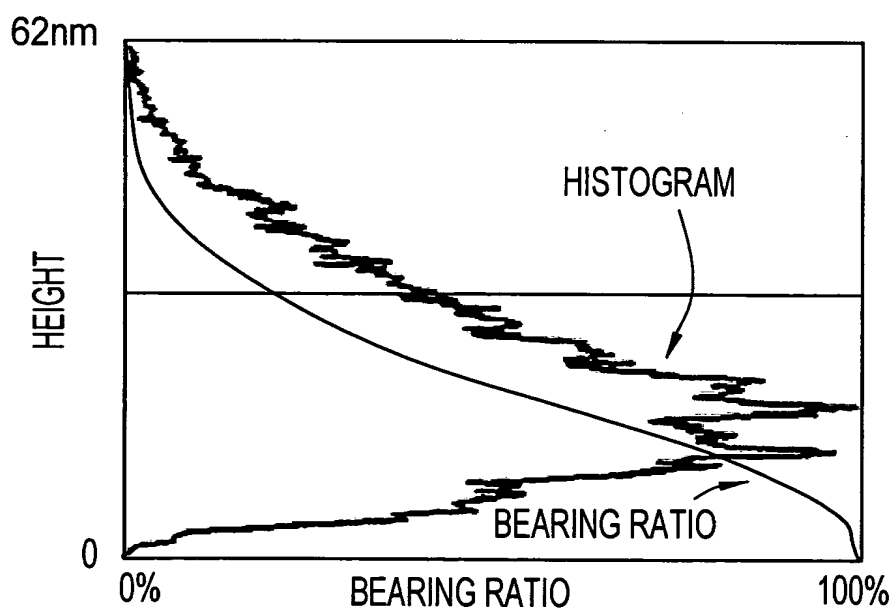
BEFORE HIGH TEMPERATURE ANNEALING

FIG. 14



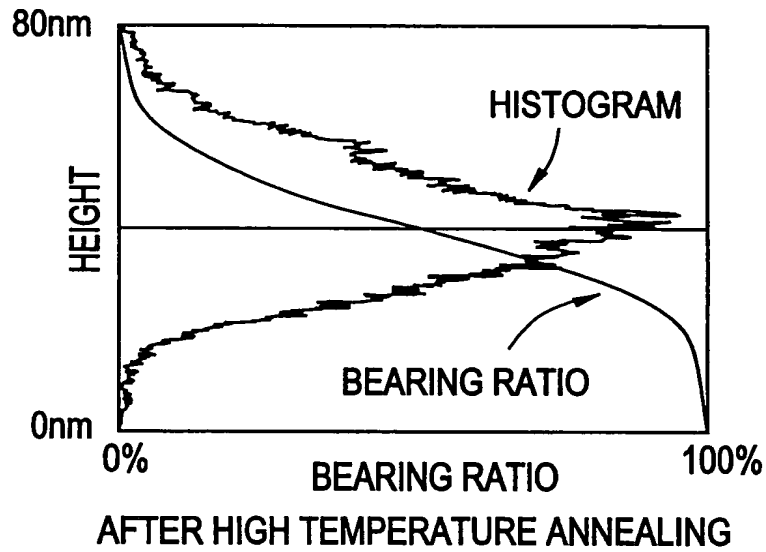
AFTER HIGH TEMPERATURE ANNEALING

FIG. 15



BEFORE HIGH TEMPERATURE ANNEALING

# FIG. 16



# FIG. 17

OBSERVATION REGION	BEFORE HIGH TEMPERATURE ANNEALING	AFTER HIGH TEMPERATURE ANNEALING
1	13.623	40.925
2	20.027	51.126
3	20.629	59.364
4	21.798	48.539
5	16.666	55.341
6	15.097	46.510
7	13.120	57.655
8	14.035	51.120
9	12.599	54.416
10	20.699	36.945
MINIMUM VALUE (%)	12.60	36.95
MAXIMUM VALUE (%)	21.80	59.36
AVERAGE VALUE (%)	16.83	50.19
STANDARD DEVIATION $\sigma$	3.61	7.18

BEARING RATIO AT  $2^{-1}$ (P-V VALUE) (%)